

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Applicants acknowledge with appreciation that the Examiner has indicated that claims 2, 6, 10, 14, 19, and 20 are allowable.

Claims 1-16 and 18-20 remain pending.

§102 rejection of Claims 1, 3-5, 7-9, 11-13, 15, 16, and 18

In Section 2 of the Office Action, the Examiner has rejected claims 1, 3-5, 7-9, 11-13, 15, 16, and 18 under 35 U.S.C. §102(e) as being unpatentable over Baum et al. (U.S. Patent 5,867,478; hereinafter referred to as "Baum"). This rejection is respectfully traversed below.

As shown above, claim 1 calls for:

1. Transmission method for transmitting OFDM-signals,
comprising the steps of
modulating said signals onto a plurality of subcarriers using
a OFDM-modulation method,
transforming said modulated signals into the time domain,
and
transmitting said signals
characterized in
that in said modulating step every M-th subcarrier is
modulated with a signal, wherein M is an integer and $M \geq 2$.

Accordingly, in one aspect of claim 1, not every subcarrier is modulated and those subcarriers that are modulated are modulated according to a regular pattern determined by the value of M, where M is greater than or equal to two. M indicates the pattern of which subcarriers are modulated. M does not indicate the number of available subcarriers. A regular

subset of the available subcarriers is modulated according to the value of M. For example, where M equals 2, every second subcarrier is modulated. Where M equals 3, every third subcarrier is modulated, and so on.

Considering the Examiner's rejection of claim 1 in Section 2 of the Office Action, it does not appear that the arguments presented by the Examiner in rejecting claim 1 over Baum in Section 2 of the Office Action establish how Baum specifically shows claim 1. In particular, it does not appear that the Examiner has established how Baum specifically shows modulating every M-th subcarrier with a signal, wherein M is an integer and $M \geq 2$, as called for in claim 1. In Section 2, the Examiner appears to argue that Baum shows this aspect of claim 1 in element 102 of Figure 1 and at column 3, lines 37-45. This passage of Baum states:

"Each small square represents a symbol. A single row (102) of the squares represents the symbols on a single subcarrier over several baud intervals or symbol intervals. Each column (104) of the squares represents the symbols in a single baud interval over several subcarriers. This two-dimensional representation may be referred to as a time-frequency grid. The symbol which is to be transmitted on the m^{th} subcarrier during the n^{th} baud interval will be denoted as $x(m,n)$."

It does not appear that this passage or row 102 of Figure 1 addresses modulating every M-th subcarrier as called for in claim 1. The grid described in the referenced passage appears to address modulating subcarriers and denoting a subcarrier out of m subcarriers as the m^{th} subcarrier. It appears that the Examiner is referring to m as the number of subcarriers to show M in claim 1. However, as noted above, in claim 1, M represents the pattern of which subcarriers to modulate, not how many subcarriers are available in the plurality of subcarriers. It does not appear that the Examiner has explained how this passage of Baum shows modulating subcarriers according to a regular pattern as called for in claim 1. Without further explanation by the

Examiner, it is submitted that the Examiner has not established how Baum specifically shows this aspect of claim 1.

Accordingly, it does not appear that the Examiner has established how Baum, as referenced by the Examiner in rejecting claim 1, shows or suggests at least these aspects of claim 1, and so it is submitted that the Examiner has not established how Baum shows or suggests claim 1 as a whole. Claims 2-4 and 19 depend from claim 1, and it is also submitted that the Examiner has not established how Baum shows or suggests claims 2-4 and 19, through their dependence on claim 1. Similar arguments apply to claims 5, 9, 13, and 18, and so to claims 6-8 and 20 that depend from claim 5, to claims 10-12 that depend from claim 9, and to claims 14-16 that depend from claim 18.

Based upon the foregoing, it is submitted that claims 1, 3-5, 7-9, 11-13, 15, 16, and 18 Are not anticipated by nor rendered obvious by the teachings of Baum, as presented and referenced by the Examiner. Accordingly, it is submitted that the Examiner's rejection of claims 1, 3-5, 7-9, 11-13, 15, 16, and 18 based upon 35 U.S.C. §102(e) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Allowable Subject Matter

In Section 3 of the Office Action, the Examiner has objected to claims 2, 6, 10, 14, 19, and 20 as being dependent on a rejected base claim.

Claims 2 and 19 depend from claim 1. As discussed above, it is submitted that the rejection of claim 1 has been overcome, and so it is respectfully requested that this objection to claims 2 and 19 be withdrawn.

Claims 6 and 20 depend from claim 5. As discussed above, it is submitted that the rejection of claim 5 has been overcome, and so it is respectfully requested that this objection to claims 6 and 20 be withdrawn.

Claim 10 depends from claim 9. As discussed above, it is submitted that the rejection of claim 9 has been overcome, and so it is respectfully requested that this objection to claim 10 be withdrawn.

Claim 14 depends from claim 13. As discussed above, it is submitted that the rejection of claim 13 has been overcome, and so it is respectfully requested that this objection to claim 14 be withdrawn.



CONCLUSION

In view of the foregoing, entry of this amendment and the allowance of this application with claims 1-16 and 18-20 is respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicants' representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP

By:


Hans R. Mahr, Reg. No. 46,138 for

William S. Frommer

Reg. No. 25,506

(212) 588-0800

